



Fig. 12 *R. gnavus* sialic acid metabolism pathway. *RgNanH* releases 2,7-anhydroNeu5Ac from α 2-3 linked sialylated glycoconjugates and is transported inside the bacterium *via* a 2,7-anhydro-Neu5Ac specific ABC transporter composed of a solute-binding protein (*RgSBP*) and two putative permeases. The 2,7-anhydro-Neu5Ac is then converted into Neu5Ac, by the action of an oxidoreductase (*RgNanOx*), before being catabolised into GlcNAc-6-P following the traditional pathway by the successive action of *NanA* (Neu5Ac aldolase), *NanK* (ManNAc kinase) and *NanE* (ManNAc-6-P epimerase).